: BEARING ASSEMBLY

: D3121241

: 9/30/2007

: N/A

: D3121 REV D

Date:

Monday, 9/10/2007 1:32:11 PM

User:

Kim Johnston

**Process Sheet** 

**Drawing Name** 

Part Number

Material

**Due Date** 

**Drawing Number** 

Project Number

**Drawing Revision** 

Customer

: CU-DAR001 Dart Helicopters Services

Job Number

: 34523 **Estimate Number** 

: 10716

P.O. Number This Issue

Previous Run

Written By

Alu: : 9/10/2007

S.O. No. : 2)

Prsht Rev. First Issue

: 34473

Type

: MACHINED PARTS

Checked & Approved By Comment

: Est Rev:A 04.02.18

New issue KJ/DS

**Additional Product** 

Job Number:



Seq. #:

Machine Or Operation:

Description:

1.0

MDELRINR12500

DELRIN ROUND BAR 1.25"

Comment: Qty.:

0.0546 f(s)/Unit

Total: 2.1840 f(s)

Material: Ø1.25 Delrin Rod

(M-DELRIN-R1.2500)Identify as D3121-25

2.0

HARDINGE





Comment: HARDINGE CNC LATHE SMALL

1-Turn D3121-25 Cap as per Folio FA387

2-Deburr

3.0 QC2



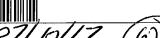
Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SECOND CHECK





4.0



5.0

D312123

Comment: SECOND CHECK



Bearing



Comment: Qty.:

1 D3121-23

1.0000 Each(s)/Unit

Total:

40.0000 Each(s)

Pick:

**Qty Part Number** 

Description

Bearing

Batch

334604 X40

### **Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES								
DATE	STEP	PROCEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
						;				
							•			
Part No	):	PAR #: Fault Category: _	NC	R: Yes	No DQ	4: <u>D</u>	Date: _(	Miola		
				QA:	N/C Closed	d:	_ Date: _			

NCR:			WORK ORDER NON-CONFORMANCE (NCR)								
		Description of NC		Corrective Action Section B							
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector			
-											
						}					
							:				

NOTE: Date & initial all entries

Date: Monday, 9/10/2007 1:32:11 PM User: Kim Johnston **Process Sheet** Drawing Name: BEARING ASSEMBLY Customer: CU-DAR001 Dart Helicopters Services Part Number: D3121241 Job Number: 34523 Job Number: Description: Seq. #: Machine Or Operation: SMALL & MEDIUM FAB RESOURCE 1 6.0 SMALL FAB 1 Comment: SMALL & MEDIUM FAB RESOURCE 1 1-Press D3121-23 Bearing into D3121-25 Cap as per Dwg D3121 INSPECT WORK TO CURRENT STEP 7.0 QC5 Comment: INSPECT WORK TO CURRENT STEP PACKAGING RESOURCE #1 8.0 PACKAGING 1 Comment: PACKAGING RESOURCE #1 Identify and Stock Location: 9.0 QC21 Comment: FINAL INSPECTION/W/O RELEASE Job Completion

Dart Ae	rospace	Ltd						
W/O:			V	ORK ORDER CHANGES				
DATE	STEP	PROCEDURE CHANGE			Ву	Date Qt	y Approval Chief Eng / Prod Mgr	Approval QC Inspector
÷								
			· · · · · · · · · · · · · · · · · · ·					
Part No	:	PAR #:	Fault Cat	tegory: NC	R: Yes	No DQA:	Date: _	
					QA: N/	C Closed:	Date: _	
NCR:			WORK ORI	DER NON-CONFORMANC	E (NCR	)		
DATE	0.750	Description of NC	Corrective Action Section B			Verificatio	n Approval	Approval
DATE	STEP Section A Initial Action Description Chief Eng Chief Eng			Sign & Date	Section C	Chief Eng	Approval QC Inspector	

NCR:			WORK ORDER NON-CONFORMANCE (NCK)								
	STEP	Description of NC		Corrective Action Section B							
DATE		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector			
		•									

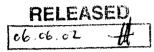
NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	34523	
Description: Cap	Part Number:	D3121-25	
Inspection Dwg: D3121 Rev: D		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST								
	<del></del>	X First Arti		_	otype			
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method o		nments	
0.315	+/-0.010	. 314				·		
Ø1.000	+/-0.010	1.0035						
Ø0.838	+/-0.002	1837						
R0.063	+/-0.010	P.063						
R0.010	+/-0.010							
0.230	+/-0.001	2.010 . <b>330</b>						
Ø0.865	+/-0.001	.864				,		
Measured by:	20	Audited by:	1.8	· · · · · · · · · · · · · · · · · · ·	Prototype	Approval:	N/A	
Date:	7 1	Date:	07/10/	17		Date:	N/A	
Rev Date	Change					Revised by	Approved	
A 04.04.20	New Issue	(P/O D3121	-241)			KJ/RF	11	
B 06.06.09	Ø1.000 diamete	r was Ø 1.024				KJ/JLM 👭		



	DESIG	4	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
	CHEC	(ED)	APPROVED A	DRAWING NO. REV. D
		A AN		D3121 SHEET 1 OF 10
	DATE		1	TITLE SCALE
	06.0	5.17		BRACKET ASSEMBLY 1:2
	Α		02.04.15	NEW ISSUE
	В		03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146
i	С		04.02.17	ADD CLEARANCE; USE -241 BEARING
	D		06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000

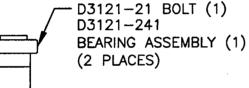


 D3121-2	21	BOLT	· (1	)
D3121-2	241			
BEARING	AS	SEME	3LY	(1)

D3121-041 BRACKET ASSEMBLY

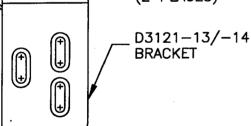
(REPLACES PREMIER P/N B30-23000-33)





D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-21 BOLT (1) D3121-241 BEARING ASSEMBLY (1) (2 PLACES)

D3121-045 (SHOWN) / D3121-046 (OPPOSITE) BRACKET ASSEMBLY

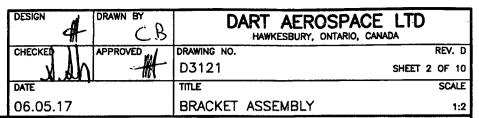
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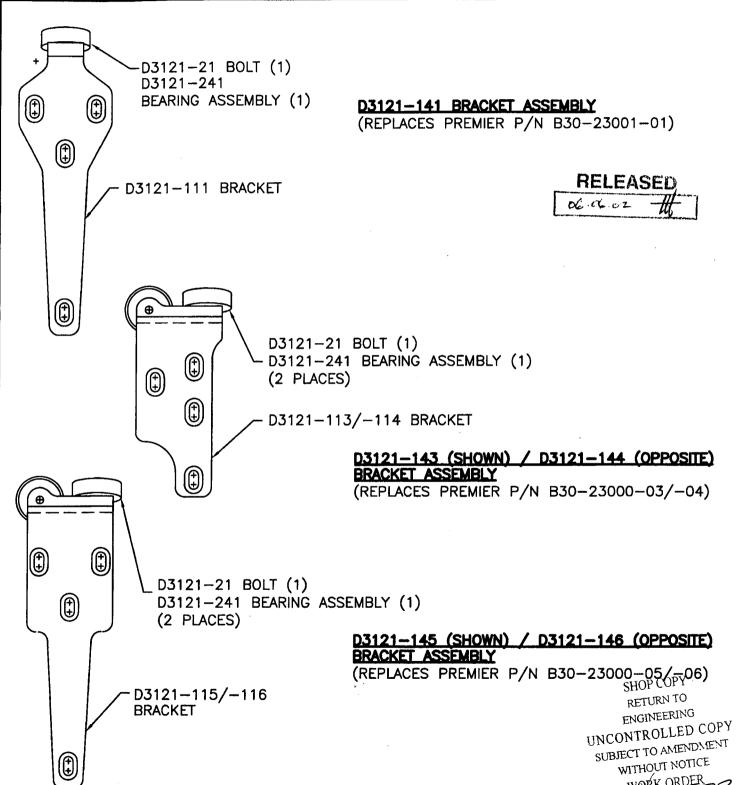
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D3121-15/-16 BRACKET

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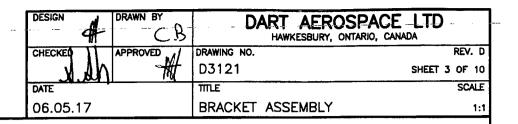




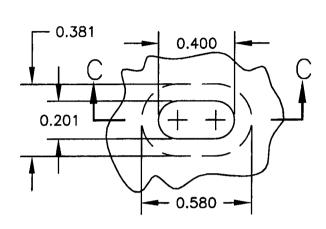


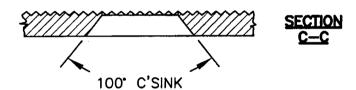
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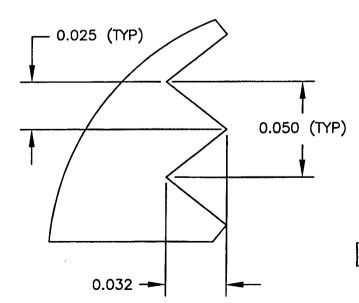








**DETAIL B:** RIDGE DETAIL PARTIAL SECTION **SCALE 1:20** 



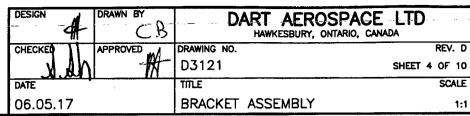
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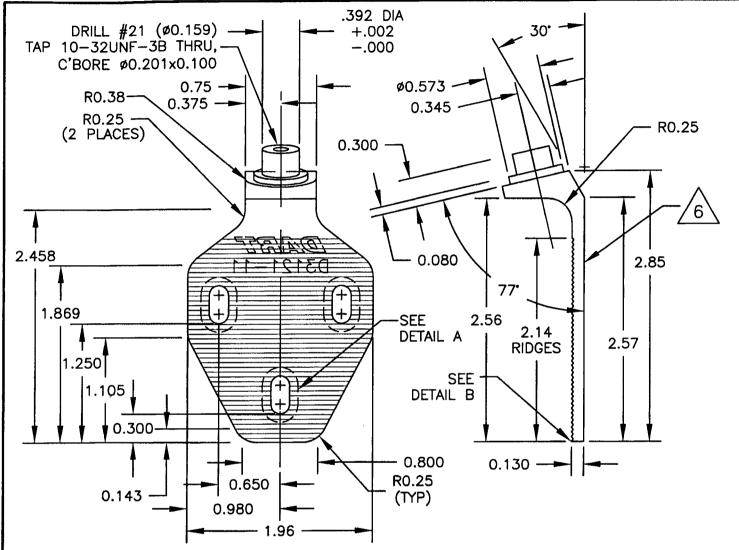
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WORK ORDER

D3121-11\_BRACKET 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)

MIN ULTIMATE TENSILE = 150 ksi MIN YIELD TENSILE = 100 ksi

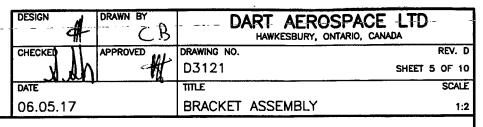
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

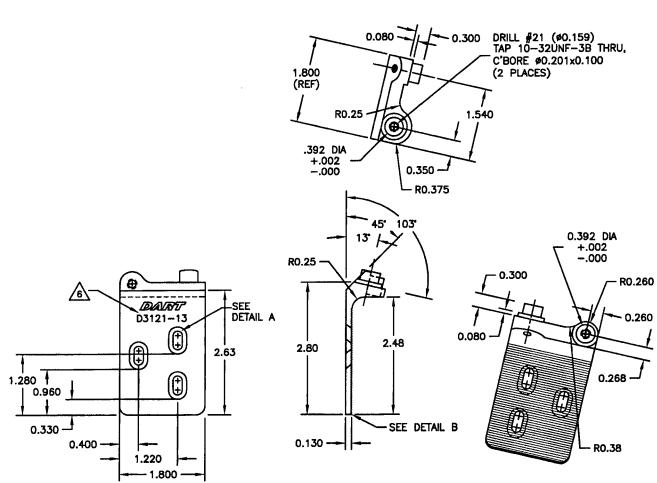
RELEASED

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# D3121-13 BRACKET (SHOWN) D3121-14 BRACKET (OPPOSITE)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi

- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

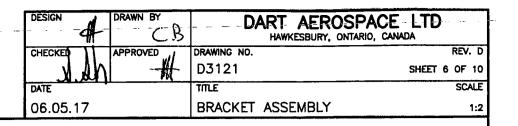
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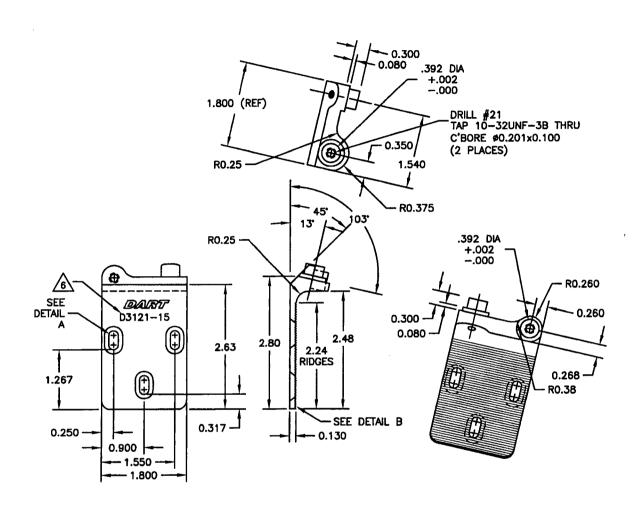
WORK ORDER 2

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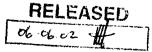
## D3121-15 BRACKET (SHOWN) D3121-16 BRACKET (OPPOSITE)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi

MIN YIELD TENSILE = 100 ksi

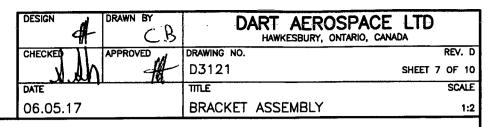
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

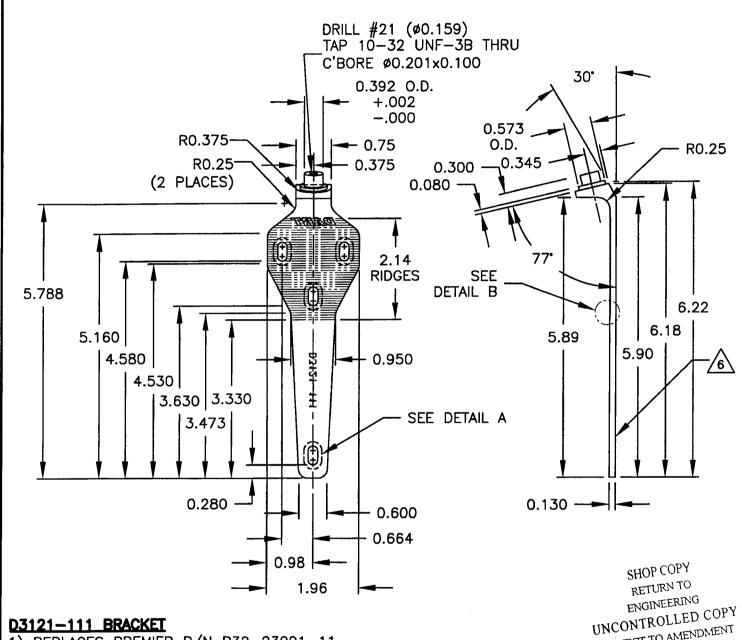
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#### D3121-111 BRACKET

1) REPLACES PREMIER P/N B32-23001-11

2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) MIN ULTIMATE TENSILE = 150 ksi MIN YIELD TENSILE = 100 ksi

- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHEWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

RELEASED

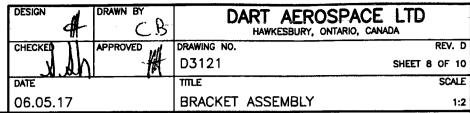
SUBJECT TO AMENDMENT

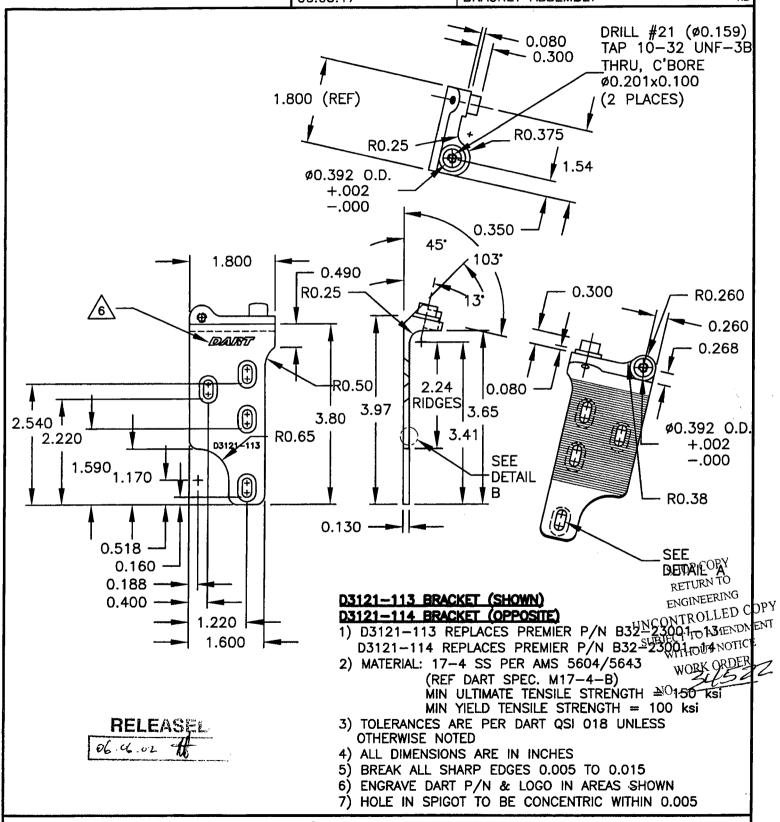
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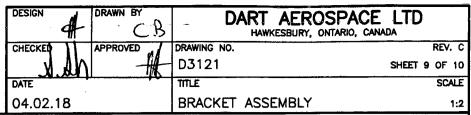


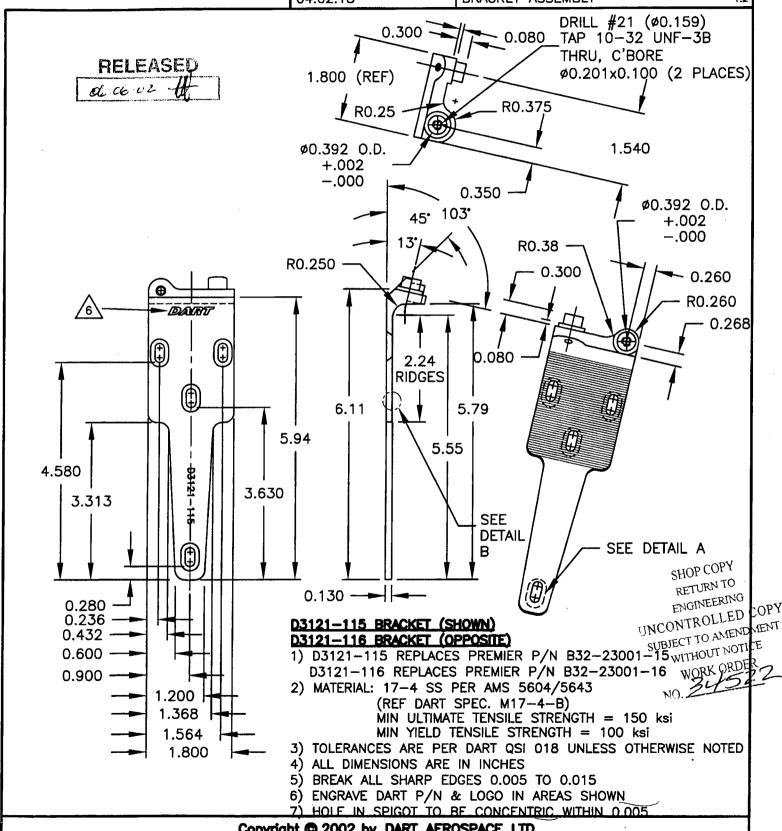




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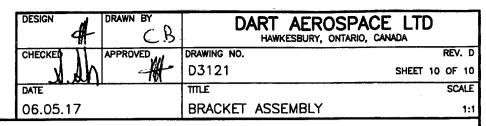


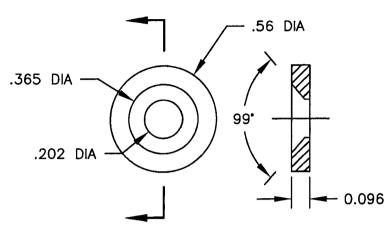




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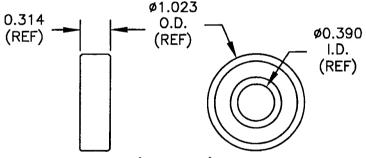






### D3121-17 WASHER (SCALE 2:1)

- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



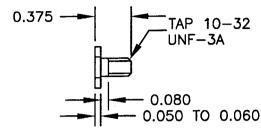
#### D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



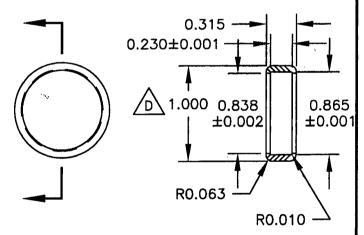
#### D3121-23 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ
- ALL DIMENSIONS ARE IN INCHES



### D3121-21 BOLT (SCALE 1:1)

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



#### D3121-25 CAP (SCALE 1:1)

- 1) MATERIAL: DELRIN ROD, Ø1.25
  - (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

RETURN TO

ENGINEERING



D3121-241 BEARING ASSEBLY (SCALE 1:1)

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RELEASE